ENVIRONMENTAL

Fact Sheet



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

ARD-6 2008

Transportation and Air Quality Planning Federal Laws Provide Tools for Change

Working Together to Clean the Air

For the past four decades, federal transportation funding policies have focused on the building and maintenance of highways. These policies have reinforced automobile-dependent lifestyles, providing less support for access to other means of transportation such as transit, bicycling and walking. Transportation decisions that favor new highways have contributed to suburban sprawl and to the dominance of the automobile in transportation planning. And although cars are manufactured to pollute less today than in the past, the rise in the number of cars on the road and their frequency of use has resulted in increased vehicle-related air pollution.

Challenged by the need to provide both mobility and clean air to people, Congress passed the Clean Air Act Amendments of 1990 (CAAA) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). ISTEA has undergone several revisions and reauthorizations over the years, most recently passed by the Congress in 2005 as the Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU). Together these laws require transportation planning to be conducted in a way that is protective of air quality and that allows for a consultative process among state air quality and transportation agencies, as well as local planning commissions.

The Clean Air Act Amendments: Increased Attention to Mobile Source Emissions

Mobile sources (cars, buses and trucks) generate four major pollutants: hydrocarbons, or volatile organic compounds (VOCs), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM). VOCs react with NOx in the presence of sunlight and elevated temperatures to form ground-level ozone, a major component of smog.

Ground-level ozone is one of the most serious air pollution problems in New Hampshire and many Northeast and mid-Atlantic states. Portions of Hillsborough, Merrimack, Rockingham and Strafford counties fail to meet the national ambient air quality standard set by the U.S. Environmental Protection Agency for ground-level ozone. Because of this, New Hampshire is required to develop a state implementation plan that commits the state to particular steps on a specific timetable to reduce emissions of the pollutants that contribute to ground-level ozone (VOCs and NOx). Failure to reduce emissions and achieve air quality standards on schedule can result in the withholding of federal transportation funds, or the need to reduce emissions from industry and businesses at a rate that could negatively affect their ability to expand or add new facilities.

With transportation accounting for over half of the emissions of these air pollutants, efforts to reduce pollution from the mobile source sector factor heavily in the state's implementation plan. Some of the programs implemented in New Hampshire to reduce motor vehicle emissions include:

- 1. The annual motor vehicle anti-tampering inspection program for pre-1996 vehicles that checks for working emission control components.
- 2. The on-board diagnostics inspections that check vehicles' on-board computers to confirm proper operation of emission control equipment.
- 3. A gasoline vapor recovery program to reduce evaporative emissions from fueling stations.
- 4. A federal reformulated gasoline program for summer fuel in the four county area.

Transportation Conformity

Perhaps the most important and far-reaching provision of the CAAA is the transportation "conformity" requirement. To ensure that state plans for the transportation and highway network do not interfere with a state's efforts to achieve attainment with air quality standards, all transportation projects that are federally funded or require any federal approvals must be able to demonstrate that they "conform" to a state's implementation plan. Failure to meet the conformity test can bring transportation programs and projects, both highway and transit, to a halt. Officials in the NH Department of Environmental Services consult regularly with officials in the NH Department of Transportation (DOT), the Federal Highway Administration, the US Environmental Protection Agency, and the regional planning agencies to ensure that transportation planning and the state's implementation plan work together toward common goals of mobility and environmental quality.

In addition to transportation conformity, the CAAA requires that all other (non-transportation) federally supported actions conform to the state's implementation plan. This requirement is known as "general" conformity.

Congestion Mitigation and Air Quality Improvement Program

While the CAAA prescribes goals and procedures for achieving air quality standards, SAFETEA-LU provides more funding and greater flexibility in its use for a variety of transportation purposes. One source of funding provided by SAFETEA-LU and its predecessors is the Congestion Mitigation and Air Quality Improvement program (CMAQ), which was created specifically to fund projects to improve air quality in nonattainment areas. CMAQ funds are awarded competitively in New Hampshire and are used for transportation projects that reduce congestion and improve air quality. Examples of some recently implemented CMAQ projects include public transit, employer trip reduction and rideshare programs, idling reduction efforts including truck stop electrification, signal coordination projects, alternative fuel vehicle programs, and bicycle and pedestrian projects.

Since the start of the CMAQ program in New Hampshire, DES has received funding for several projects, including a study on motor vehicle diesel emissions and their effect on air quality in the state; evaluation of the anti-tampering and on-board diagnostics vehicle inspection programs; increased deployment of alternative fuel vehicles and fueling infrastructure in the state; and an aggressive idling reduction campaign aimed at heavy duty diesel vehicles. The projects being

funded through the CMAQ program will provide emission reductions from motor vehicles and will contribute to attainment of air quality standards in New Hampshire.

What Can You Do to Help Reduce Air Pollution Caused By Cars?

According to the EPA, of all daily activities, driving a car is probably the single most polluting thing the public does. Every driver can make a significant difference in reducing motor vehicle emissions by making the most of traveling options, such as:

- Carpooling, using public transportation, combining trips, biking and walking.
- Eliminating unnecessary idling.
- Keeping speeds to 65 mph or lower.
- Avoiding aggressive driving habits, such as jack rabbit starts and stops.
- Properly maintaining vehicles.
- Keeping tires inflated to their recommended pressure.
- Buying the most efficient vehicle available that meets one's needs.
- Using cleaner burning alternative fuels or advanced technologies such as natural gas, propane, electric or hybrid vehicles.

For more information about air quality issues, please contact the DES Air Resources Department, on-line at www.des.nh.gov or call (603) 271-1370.